

# **EXHIBIT D**

# **FILED UNDER SEAL**

# **EXHIBIT 5**

# **FILED UNDER SEAL**

Message

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**From:** Drew Bagnell [dbagnell@uberatc.com]  
**Sent:** 3/19/2016 1:16:34 PM  
**To:** John Bares [bares@uberatc.com]; Brian Zajac [bzajac@uberatc.com]  
**Subject:** Re: NewCo LIDAR specs

There absolutely are; we pointed this out a lot in Dragonfly design.

Options:

- 1) Continue down current path which will rely on camera to pull those out and have a backup lidar that is strictly better and can handle all our situations for even higher speed. Not enough density for understanding things far away, but enough to detect that they are there.
- 2) Improve our lidar quality at very narrow FOV, far range dramatically-- even to even detect objects against clutter; but have no fallback if our Plan A sputters, and a worrisomely sparse pattern elsewhere.

I think we need to bang smart heads against this and decide; there are definite pros and cons of each-- it's not a slam dunk, but it's sure better then not having options!

--d

On Sat, Mar 19, 2016 at 6:06 AM John Bares <[bares@uberatc.com](mailto:bares@uberatc.com)> wrote:

FWIW Drew. My California guy says [REDACTED] [REDACTED] I have some diagrams to share.

**From:** Brian Zajac [mailto:[bzajac@uberatc.com](mailto:bzajac@uberatc.com)]  
**Sent:** Friday, March 18, 2016 8:07 AM  
**To:** Drew Bagnell  
**Cc:** John Bares  
**Subject:** Re: NewCo LIDAR specs

Sounds good. Thanks for the update, Drew.

**John, can you please send us the sanitized specifications for both LIDAR? I'd like to get Pete going on layout and performance simulation ASAP so that we can validate and steer their design requirements. Thanks!**

- BZ

On Fri, Mar 18, 2016 at 11:00 AM, Drew Bagnell <[dbagnell@uberatc.com](mailto:dbagnell@uberatc.com)> wrote:

Brian,

JB and I had a short, but really good, chat about this yesterday. He definitely sees the value in moving the 360 up--- the good news is that all of the work right now goes for either.

I think we all sit down and make this decision together in a few weeks based on the trade-offs based on the conversation.

--d

On Tue, Mar 15, 2016 at 3:21 PM, Brian Zajac <[bzajac@uberatc.com](mailto:bzajac@uberatc.com)> wrote:

Hi John,

Can you please send me the specifications for the NewCo LIDARs for distribution to a small "need to know" group of the Dragonfly team? We will start a conceptual layout and evaluation of their expected performance against our use cases and requirements ASAP. Our goal is to provide early feedback to help direct early development.

Also, Drew and I were wondering if the current priority of driving LIDAR vs. 360 LIDAR makes sense or can be changed. Would we rather have a Velodyne alternative sooner given it enables 45 mph operation and almost 50% of all Uber rides? Just a thought.

Thanks!

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